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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,584	01/31/2006	Stephan Blicker	BLICKER1	3683

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EXAMINER	
SIMS, JING F	

ART UNIT	PAPER NUMBER
4148	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/566,584	BLICKER ET AL.	
	Examiner	Art Unit	
	JING SIMS	4148	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 January 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☒ Claim(s) *4-8 and 12-15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01/31/2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *07/14/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The instant application having Application No. 10566584 filed on 01/31/2006 is presented for examination by the examiner.

Oath/Declaration

2. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in **37 C.F.R. 1.63.**

Priority

3. As required by **M.P.E.P. 201.14(c)**, acknowledgement is made of applicant's claim for priority based on applications filed on July 31, 2003 (European Patent Office 0301734.8).

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

However, to overcome a prior art rejection, applicant(s) must submit a translation of the foreign priority papers in order to perfect the claimed foreign priority because said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Drawings

4. The applicant's drawings submitted are acceptable for examination purposes.

Information Disclosure Statement

5. The information disclosure statement (IDS) submitted on 07/14/2006 was filed. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

6. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
(d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
(f) BACKGROUND OF THE INVENTION.
    (1) Field of the Invention.
    (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
(g) BRIEF SUMMARY OF THE INVENTION.
(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
(i) DETAILED DESCRIPTION OF THE INVENTION.
(j) CLAIM OR CLAIMS (commencing on a separate sheet).
(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

7. The disclosure is objected to because of the following informalities:

On Page 3, line 30, missing close bracket, and the first letter T of the term "terrestrial" should be capitalized.

Appropriate correction is required

Claim Objections

8. Claim 5 is objected because of the following informalities: the limitation "radius server (5)" on page 10, line 33, refer to the drawing by reference number 5; however, the reference number for radius server in figure 1 is referred by reference number 2.

9. Claims 4-8, and 12-15 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent clam. See MPEP § 608.01(n).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claim 9 is rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. "A first authentication unit (2)" and "a second unit (5;6) are critical or essential to the practice of the invention, but not included in the disclosure. See In re Mayhew, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). The

drawing in Figure 1 does not support the claim subject matter "a first authentication unit (2) is connected via a data line to a second unit (5 and/or 6)". The drawing in Figure 2 does not disclose a first authentication unit (2) or a second unit (5), nor does Figure 2 support the claim limitation "a first authentication unit (2) is connected via a data line to a second unit (5 and/or 6)".

12. Claim 15 is rejected under 35 U.S. C. 112, first paragraph, as failing to disclose the connection between routing module (7) that describes in claim 15 and registration server(2) that describes in claim 10 in disclosure.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

14. **Claims 1, 3-5, 9-12, 14** are rejected under 35 U.S.C. 102(e) as being anticipated by Skog et al. (US 6977917) (hereinafter Skog).

As per claim 1, Skog discloses "method for application layer authentication of subscribers connected to the authenticating network domain by a 2G or 2.5G GPRS core network or a 3G UMTS network, characterized by using data which are assembled by the network layer during establishment of a PDP context in GPRS networks" (with

respect to the limitation “application layer authentication” Skog teaches "a micro browser within a wireless terminal to access server" on column 3, line 3-12. A micro browser is an application that runs on application layer. Skog teaches the limitation “using data which are assembled by the network layer” by “mapping an IP address to an MSISDN number with respect to an authentication process” on column 3, line 16-20. According to OSI Seven Layer Model in Wikipedia the best-known example of a layer 3 which is network layer protocol is the Internet Protocol (IP). Skog also teaches “during establishment of a PDP context” by “the RADIUS accounting messages comprise information packets” on column 3, line 66-67, and column 4, line 1-4. PDP context is packet data protocol. Skog also teaches “by a 2G or 2.5G GPRS core network or a 3G UMTS network” by “via a wireless radio network" on column 3, line 24-28, and “in a GPRS network, the access server would be implemented in the GGSN” on column 5, line 42-45).

As per claim 3, Skog discloses “method according to any preceding claim, comprising the step that a Gateway GPRS Support Node receives a context creation request and queries a registration server to get an IP address assigned for the particular PDP context” (column 4, line 54-62, the IP address cannot alone be used as user ID since the IP address is dynamically allocated to the mobile terminal. To overcome it, WAP gateway receives request from access server to get the IP address assigned for the mobile terminal to user for packets transferring) “and within the context the registration server receives the MSISDN and/or the IMSI of the subscriber and stores for each PDP context a pair of IP address and IMSI/MSISDN in a session database”

(column 4, line 62-67, and column 5, line 1-13, with respect to this limitation, Skog teaches that the WAP gateway enables mapping between the IP address and the MSISDN that receives in an accounting request. The IP address and the MSISDN are stored as a record within the mapping session database.).

As per claim 4, Skog discloses "method according to any preceding claim, comprising the step that a proxy server is provided which checks IMSI/MSISDN from a radius server database and IMSI/MSISDN from application domain database for match" (Figure 5, column 6, line 14-23, the mail server 180 performs the functionality as proxy server. The Mail server makes a request of the session database for the provided user's IP to be translated to MSISDN. Then, Mail server requests MSISDN from user database 170, is there is a match the access is granted. In the instant application, the radius server database is session dataset in Figure 1 presented by reference number 3, and the application domain database is subscriber database also in Figure 1 presented by reference number 4).

As per claim 5, Skog discloses "method according to any preceding claim, comprising the step that if the IMSI/MSISDN pairs are matching, the radius server checks the subscribers IP address in the IP network layer for match with the IP address assigned by the Radius server" (column 4, line 12-21, the WAP gateway, which includes the radius server API and a database, checks IP address from mobile terminal in the network layer and the IP address of the mobile terminal stored in the database for a mach).

As per claim 9, Skog discloses "system of units in a mobile telecommunication network, characterized that at least a first authentication unit (2) is connected via a data line to a second unit (5; 6) which assembles data according to the method of claim 1" (Figure 5, the first authentication unit includes RADIUS server (165) and Session DB (175). The second unit includes Mail server acts as a Proxy server, and mail server is connects to Users DB which has the information of the subscriber. The first authentication unit is connected to the second unit via a data line).

As per claim 10, Skog discloses "system according to claim 9, wherein the first unit comprises a registration server" (Figure 2, Figure 5, RADIUS is the first unit to register a mobile terminal).

As per claim 11, Skog discloses "system according to claim 9 or 10, wherein the first unit is connected to a session database" (Figure 5, RADIUS server 165 is connected to Session DB 175).

As per claim 12, Skog discloses "system according to any of claims 9 to 11, wherein the second unit comprises a proxy server" (Figure 5, column 6, line 14-23, the mail server 180 performs the functionality as proxy server).

As per claim 14, Skog discloses "system according to any of claims 9 to 13, wherein the second unit (5; 6) is connected to a subscriber database (4)" (Figure 5, the authentication unit is connected to Users DB which includes the information of subscriber).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

16. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Skog in view of Chaudhary et al. (US 7155526) (hereinafter Chaudhary).

As per claim 2, Skog discloses "method according to claim 1". Skog does not specifically disclose the additional feature of "comprising the step that during PDP context establishment the Serving GPRS Support Node (SSGN) is authenticating the subscriber using the A3/A8 algorithm based on the end devices SIM card",

However, Chaudhary discloses "comprising the step that during PDP context establishment the Serving GPRS Support Node (SSGN) is authenticating the subscriber using the A3/A8 algorithm based on the end devices SIM card" (column 11, line 36-48, column 12, line 11-19, and Figure 5, verify user equipment by sending RAND to SIM card and get a response generated by the GSM algorithm A8 and then establish PDP context message to GGSN over GTP control protocol).

Skog and Chaudhary are analogous art because they are from the same field of endeavor of wireless network authentication.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify "sending account message to RADIUS server via data packets from a user" as discussed in Skog by indicating the packets are in PDP context data and the

authentication method is A8 algorithm as described by Chaudhary, because it would provide for the purpose of deploying a standard authentication algorithm such as A8, since standard algorithms are broadly developed, tested and deployed and consequently makes the system developments easier and more efficient (column 11, line 36-48, column 12, line 11-19, and Figure 5).

17. **Claims 6,7,13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Skog in view of Pirttimaa et al. (US 0154400 A1) (hereinafter Pirttimaa).

As per claim 6, Skog discloses “method according to any preceding claim". Skog does not disclose “comprising the step that the proxy server (5) parses the application layer for IP addresses given in the headers of registration messages and checks for match with the IP address which was already checked for match with the IP address assigned by the radius server (2)”.

However, Pirttimaa discloses “comprising the step that the proxy server (5) parses the application layer for IP addresses given in the headers of registration messages and checks for match with the IP address which was already checked for match with the IP address assigned by the radius server (2)” (page 3, paragraph 0042, and Figure 2, The Proxy Call State Control Function P-CSCF on the server 30 performs an address comparison which an IP address derived from a received IP datagram conveying the SIP message or derived from a data base, compare to an IP address indicated in a header, e.g. contact header of the SIP message. SIP message is a registration message and to obtain the IP address for comparison from a packet header, the server must parse the header to obtain the IP address).

Skog and Pirttimaa are analogous art because they are from the same field of endeavor of wireless network authentication.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the mail server as discussed in Skog by also extending the functionality of a proxy server with parsing the application layer for IP address that given in IP header as described by Pirttimaa when comparing IP address between Session DB and Users DB because it would provide the purpose of offering the complete details about how the process has been accomplished (page 3, paragraph 00420).

As per claim 7, Pirttimaa discloses "method according to any preceding claim, comprising the step that in all subsequent messages arriving at the proxy server, it checks for match of IP address in the IP packet overhead field for source address with that in the application layer protocol header fields and verifies the matching pairs against the IP address assigned by the Radius server" (page 4, paragraph 0044, if the IP address compared do not indicate the same location, The SIP request message is dropped. Otherwise, shows in Figure 4, the subsequent data packets will go through the same process as described in claim 6).

Skog and Pirttimaa are analogous art because they are from the same field of endeavor of wireless network authentication.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the mail server as discussed in Skog by also extending the functionality of a proxy server with parsing the application layer for IP address that given in IP header as described by Pirttimaa when comparing IP address between Session

DB and Users DB because it would provide the purpose of offering the complete details about how the process has been accomplished (page 3, paragraph 00420).

As per claim 13, Skog discloses "system according to any of claims 9 to 12".

Skog does not disclose "wherein the second unit comprises a Proxy Call State Control Function".

However, Pirttimaa discloses "the second unit comprises a Proxy Call State Control Function" (page 3, paragraph 0042, Figure 3, it includes a Proxy Call State control Function, P-CSCF).

Skog and Pirttimaa are analogous art because they are from the same field of endeavor of wireless network authentication.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the mail server as discussed in Skog by also extending the functionality of a proxy server with parsing the application layer for IP address that given in IP header as described by Pirttimaa when comparing IP address between Session DB and Users DB because it would provide the purpose of offering the complete details about how the process has been accomplished (page 3, paragraph 00420).

18. **Claim 8, 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Skog in view of Naim et al. (US 6678517 B2) (hereinafter Naim).

As per claim 8, Skog discloses "method according to any preceding claim". Skog does not discloses the additional feature of "a routing module is provided which is the standard entry point for all messages and decides by evaluation of PrivID which network node will handle the message".

However, Naim discloses "that a routing module is provided which is the standard entry point for all messages and decides by evaluation of PrivID which network node will handle the message" (column 3, line 26-37, Figure 1 and Figure 2(a), Figure 1 teaches Wireless Soft Switch (WSS) acts as a standard entry point handling wireless calls for 2G, 2.5G and 3G mobile phones. WSS has an SIP interface. SIP is a signaling protocol used to handle signaling message. In the instant application, PrivID is the requested information given by subscriber during registration for the service. PrivID and SIP both include message that can be identified by an entry point, then make a transferring decision based on).

Skog and Naim are analogous art because they are from the same field of endeavor of to authenticate to a wireless network.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the GGSN entry point as discussed in Skog by WSS entry point as described in Naim because it would provide the purpose of routing ability for 2G, 2.5G or 3G wireless networks (column 3, line 26-37, Figure 1 and Figure 2(a)).

As per claim 15, Skog discloses "system according to any of claims 9 to 14".

Skog does not disclose "wherein a routing module (7) is provided decides by evaluation of PrivID which network node will handle the message "

Naim discloses "a routing module (7) is provided decides by evaluation of PrivID which network node will handle the message" (column 3, line 26-37, Figure 1 and Figure 2(a). WSS acts as a Router module point handling wireless calls for 2G, 2.5G and 3G mobile phones. WSS has an SIP interface. SIP is a signaling protocol used to

handle signaling message. In the instant application, PrivID is the requested information given by subscriber during registration for the service. PrivID and SIP both include message that can be identified by an entry point, then make a transferring decision based on).

Skog and Naim are analogous art because they are from the same field of endeavor of to authenticate to a wireless network.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the GGSN entry point as discussed in Skog by WSS entry point as described in Naim because it would provide the purpose of routing ability for 2G, 2.5G or 3G wireless networks (column 3, line 26-37, Figure 1 and Figure 2(a)).

Conclusion

19. The following prior art made of record and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure. See **MPEP 707.05(c)**.

20. The following reference teaches execution of trial data.

US 6480508 B1

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JING SIMS whose telephone number is (571)270-7315. The examiner can normally be reached on 7:30am-5:00pm EST, Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Pham can be reached on (572)272-3689. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

October 6, 2008 Jing Sims

/J.S./
Examiner, Art Unit 4148

/THOMAS K PHAM/
Supervisory Patent Examiner, Art Unit 4148